IN THE CLAIMS

Please amend claims 1- 4 as follows.

This listing of the claims replaces all prior versions of the claims in the application.

1. (Currently Amended) An isolated polypeptide comprising an amino acid sequence selected from the group consisting of:

a) an amino acid sequence of SEQ ID NO:1,

b) a naturally occurring amino acid sequence having at least 95% sequence identity to ~~an~~ the amino acid sequence of SEQ ID NO:1, and

c) ~~a biologically active fragment of an amino acid sequence of SEQ ID NO:1, and~~

~~d)~~ an immunogenic fragment of ~~an~~ the amino acid sequence of SEQ ID NO:1 consisting of at least 15 contiguous amino acid residues of SEQ ID NO:1.

2. (Currently Amended) An isolated polypeptide of claim 1, having ~~a~~ the amino acid sequence of SEQ ID NO:1.

3. (Currently Amended) A composition comprising ~~an effective amount of~~ a polypeptide of claim 1 and an acceptable excipient.

4. (Currently Amended) A composition of claim 3, wherein the polypeptide has the amino acid sequence of SEQ ID NO:1.

5. (Withdrawn) An isolated polynucleotide encoding a polypeptide of claim 1.

6. (Withdrawn) A recombinant polynucleotide comprising a promoter sequence operably linked to a polynucleotide of claim 5.

7. (Withdrawn) A cell transformed with a recombinant polynucleotide of claim 6.

8. (Withdrawn) A method for producing a polypeptide of claim 1, the method comprising:

a) culturing a cell under conditions suitable for expression of the polypeptide, wherein said cell is transformed with a recombinant polynucleotide, and said recombinant polynucleotide comprises a promoter sequence operably linked to a polynucleotide encoding the polypeptide of claim 1, and

b) recovering the polypeptide so expressed.

9. (Withdrawn) An isolated antibody which specifically binds to a polypeptide of claim 1.

10. (Withdrawn) An isolated polynucleotide comprising a polynucleotide sequence selected from the group consisting of:

a) a polynucleotide sequence of SEQ ID NO:2,

b) a naturally occurring polynucleotide sequence having at least 95% sequence identity to a polynucleotide sequence of SEQ ID NO:2,

c) a polynucleotide sequence complementary to a),

d) a polynucleotide sequence complementary to b), and

e) an RNA equivalent of a)-d).

11.-14. (Canceled)

15. (Withdrawn) A method for screening a compound for effectiveness as an agonist of a polypeptide of claim 1, the method comprising:

a) exposing a sample comprising a polypeptide of claim 1 to a compound, and

b) detecting agonist activity in the sample.

16. (Withdrawn) A method for screening a compound for effectiveness as an antagonist of a polypeptide of claim 1, the method comprising:

a) exposing a sample comprising a polypeptide of claim 1 to a compound, and

b) detecting antagonist activity in the sample.

17. (Withdrawn) A method for screening a compound for effectiveness in altering expression of a target polynucleotide, wherein said target polynucleotide comprises a polynucleotide sequence of SEQ ID NO:2, the method comprising:

a) exposing a sample comprising the target polynucleotide to a compound, under conditions suitable for the expression of the target polynucleotide,

b) detecting altered expression of the target polynucleotide, and

c) comparing the expression of the target polynucleotide in the presence of varying amounts of the compound and in the absence of the compound.

18. (Withdrawn) A method for assessing toxicity of a test compound, said method comprising:

a) treating a biological sample containing nucleic acids with the test compound,

b) hybridizing the nucleic acids of the treated biological sample with a probe comprising at least 20 contiguous nucleotides of a polynucleotide of claim 10 under conditions whereby a specific

hybridization complex is formed between said probe and a target polynucleotide in the biological sample, said target polynucleotide comprising a polynucleotide sequence of a polynucleotide of claim 8 or fragment thereof,

c) quantifying the amount of hybridization complex; and

d) comparing the amount of hybridization complex in the treated biological sample with the amount of hybridization complex in an untreated biological sample, wherein a difference in the amount of hybridization complex in the treated biological sample is indicative of toxicity of the test compound.

19. (Withdrawn) A diagnostic test for a condition or disease associated with the expression of NSYN-1 in a biological sample comprising the steps of:

a) combining the biological sample with an antibody of claim 9, under conditions suitable for the antibody to bind the polypeptide and form an antibody: polypeptide complex, and

b) detecting the complex, wherein the presence of the complex correlates with the presence of the polypeptide in the biological sample.

20. (Withdrawn) The antibody of claim 9, wherein the antibody is:

a) a chimeric antibody,

b) a single chain antibody,

c) a Fab fragment,

d) a $F(ab')_2$ fragment,

e) a Fv fragment, or

f) a humanized antibody.

21.-34. (Canceled)

35. (Withdrawn) A method of screening for a compound that specifically binds to the polypeptide of claim 1, the method comprising:

a) combining the polypeptide of claim 1 with at least one test compound under suitable conditions, and

b) detecting binding of the polypeptide of claim 1 to the test compound, thereby identifying a compound that specifically binds to the polypeptide of claim 1

36. (Withdrawn) A method of making a polyclonal antibody, the method comprising:

a) immunizing an animal with the polypeptide of claim 2, or an immunogenic fragment thereof, under conditions to elicit an antibody response,

b) isolating antibodies from said animal, and

c) screening the isolated antibodies with the polypeptide, thereby identifying a polyclonal antibody which binds specifically to a polypeptide comprising an amino acid sequence of SEQ ID NO:1.

37. (Withdrawn) A method of making a monoclonal antibody, the method comprising:

a) immunizing an animal with the polypeptide of claim 2, or an immunogenic fragment thereof, under conditions to elicit an antibody response,

b) isolating antibody producing cells from the animal,

c) fusing the antibody producing cells with immortalized cells to form monoclonal antibody-producing hybridoma cells,

d) culturing the hybridoma cells, and

e) isolating from the culture monoclonal antibody which binds specifically to a polypeptide comprising an amino acid sequence of SEQ ID NO:1.